

### **Remarks and Arguments**

Claims 1-86 have been presented for examination. Claims 1 and 12 have been amended. It is noted that the office communication of August 9, 2005 refers only to 16 claims. However, 86 claims were originally filed with the application and paid for as noted on the attached copy of the filing receipt. Since claims 17-86 were not mentioned in the office communication as required by MPEP §707.07(i), applicant assumes that these claims do not stand rejected and will not comment on them in the discussion below.

Claims 1-16 have been rejected under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 6,304,942 (DeKoning). The examiner comments that the DeKoning reference discloses all of the recited limitations.

The present invention is directed to a method and system for providing users with access to resources, such as storage devices. The users are connected to access interfaces, which are, in turn, connected to a pool of resources by a switch fabric. The access interfaces receive access requests from each client and, in response to each request for a transaction, dynamically select a subset of the resource pool to use for that transaction. If the transaction is a read operation, then a subset of the resources containing the data is selected. However, if the transaction is a write operation, then a subset of resources is selected that allows the workload to be allocated dynamically over the resources, with data constantly being directed to those resources that are currently least active. Of course, this may result in data being written to resources other than the resources from which that data was previously read.

The DeKoning patent discloses a method and system for converting an original data storage system into an enhanced data storage system that can take advantage of increased capacity. As disclosed, the original data storage system comprises a plurality of disks that are controlled by two or more RAID controllers. The RAID controllers accept a LUN specification from a host system that determines a "volume" on which data will be stored. In response to the specified LUN value, the RAID controllers actually choose the disks on which the data is stored. For example, the data may be "striped" across several disks in accordance with the RAID level that is selected. According to DeKoning, in an enhanced system, for example, when new disks with

additional capacity are detected, an enterprise storage controller located between the host system reconfigures the RAID controllers so that they pass the data for a specified LUN value directly through to one disk. The enterprise controller then reads mapping information on the disks to determine the data that is stored thereon and then redistributes the data over the original disks and the new disks. See, for example DeKoning, column 6, line 57 to column 7, line 17. However, it is clear in DeKoning that this redistribution of data occurs when additional capacity is detected or when a command is received from the host system to initiate a reconfiguration process (DeKoning, column 8, lines 12-15) and not in response to each access request.

Thus, DeKoning differs substantially from the present invention and the claims have been amended to particularly point out this difference. Claim 1 is illustrative. It recites, in lines 4-7, "...an access interface module which receives requests for service from the client and, in response to each service request, dynamically selects a subset of the plurality of resources to provide the requested service and to distribute the workload across the plurality of resources..." The DeKoning system only reconfigures the storage system in response to a reconfiguration request or in response to the detection of additional storage capacity. Thus, it has not element or mechanism corresponding to that recited in claim 1. Claim 1 patentably distinguishes over the cited reference.

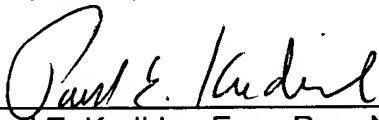
Claims 2-11 are dependent on claim 1 and incorporate the limitations thereof. therefore, they distinguish over the cited reference in the same manner as amended claim 1. In addition, these claims contain other limitations not disclosed in DeKoning. For example, claim 3 recites that the switch fabric recited in claim 1 that connects the access interface module to the selected subset of resources comprises separate switches for data and control information. Two such separate paths are not disclosed in DeKoning. The examiner points to DeKoning column 6, lines 8-17. However, this section of DeKoning discloses that the storage array controller (RAID controller) translates between LUNs provided by the host system and the actual physical disk addresses at which the information is stored. There is no indication that data and control information from a single request follow different paths to the disks in the DeKoning system. Therefore, claim 3 patentably distinguishes over the cited reference. In addition, claims 4-6 recite additional details of the two switch fabrics. Since

DeKoning does not disclose two switch fabrics, the additional details recited in claims 4-6 are also not disclosed in DeKoning. Claims 4-6 therefore patentably distinguish over the cited reference.

Claim 12 has been amended in a similar manner to claim 1. Consequently, it distinguishes over the cited reference in the same manner as claim 1. Claims 13-16 are dependent on amended claim 12 and incorporate the limitations thereof. Consequently, they distinguish over the cited reference in the same manner as claim 12. In addition, claims 13-16 contain limitation that parallel the limitations in claims 4-6. Therefore, they distinguish over the cited reference in the same manner as those latter claims.

In light of the forgoing amendments and remarks, this application is now believed in condition for allowance and a notice of allowance is earnestly solicited. If the examiner has any further questions regarding this amendment, he is invited to call applicants' attorney at the number listed below. The examiner is hereby authorized to charge any fees or direct any payment under 37 C.F.R. §§1.17, 1.16 to Deposit Account number 02-3038.

Respectfully submitted



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